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>Title: **JP11260372A2: MANUFACTURE OF NONAQUEOUS SECONDARY B**

Country: **JP Japan**

Kind: **A**

Inventor: **FURUKAWA SANEHIRO;  
FUJIMOTO MASAHIWA;  
YOSHINAGA NORIYUKI;  
UENO KOJI;**



Assignee: **SANYO ELECTRIC CO LTD**  
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Published / Filed: **1999-09-24 / 1999-01-14**

Application Number: **JP1999000008215**

IPC Code: **H01M 4/66; H01M 2/02; H01M 4/02; H01M 10/40;**

Priority Number: **1999-01-14 JP1999019998215**

Abstract:

... PROBLEM TO BE SOLVED: To improve the cycle characteristic and load characteristic, while preventing the elution of a collector by constructing a positive electrode collector and/or a positive electrode armor of aluminum with aluminum oxide coating on the surface and having lithium intercalate into a negative electrode material by injecting an electrolyte.

... SOLUTION: A positive electrode collector is constructed of an aluminum foil with the surface covered with aluminum oxide. By mixing petroleum coke with N-methylpyrrolidone solution, in which polyvinylidene fluoride is dissolved, a mixed solution is prepared. Next, by applying this mix solution to a negative electrode collector made of copper foil and then bringing the negative collector into contact with lithium foil, a negative electrode 2 is formed. Lithium on the negative electrode 2 is intercalated into the petroleum coke serving as a negative electrode material after injecting the electrolyte. Then, a separator 3 is arranged between the positive electrode 1 and the negative electrode 2, and these are wound up into a spiral shape and form a group 4 of electrodes.

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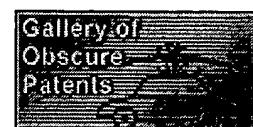
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## PATENT ABSTRACTS OF JAPAN

(21) Application number: **11008215**(51) Int'l. Cl.: **H01M 4/66 H01M 2/02 H01M 10/40**(22) Application date: **14.01.99**

(30) Priority:

(43) Date of application publication: **24.09.99**

(84) Designated contracting states:

(71) Applicant: **SANYO ELECTRIC CO**(72) Inventor: **FURUKAWA SANEHIRO  
FUJIMOTO MASAHIRO  
YOSHINAGA NORIYUKI  
UENO KOJI**

(74) Representative:

### **(54) MANUFACTURE OF NONAQUEOUS SECONDARY BATTERY**

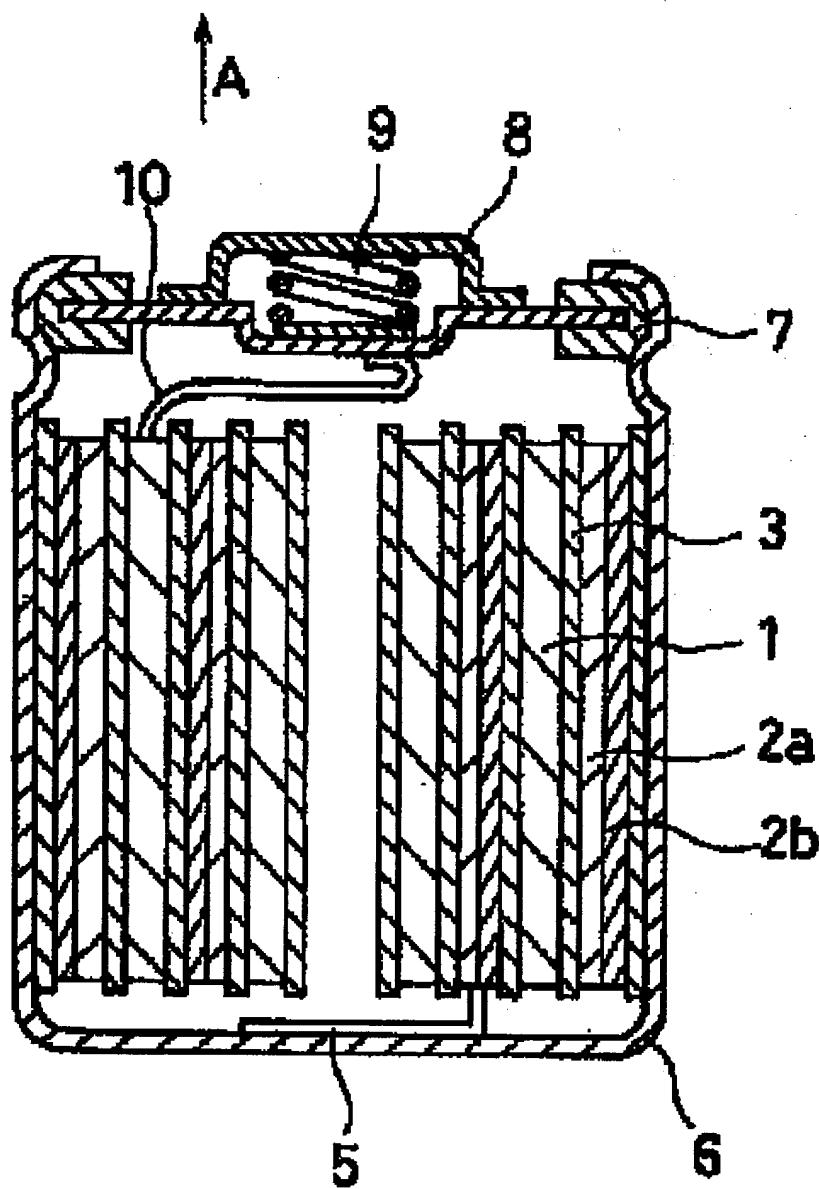
(57) Abstract:

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